



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/620,016	07/14/2003	Jack A. Zeineh	TRE1.PAU.10	8634
23386	7590	01/30/2006	EXAMINER	
MYERS DAWES ANDRAS & SHERMAN, LLP 19900 MACARTHUR BLVD., SUITE 1150 IRVINE, CA 92612			SMITH, CAROLYN L	
			ART UNIT	PAPER NUMBER
			1631	

DATE MAILED: 01/30/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/620,016

Applicant(s)

ZEINEH ET AL.

Examiner

Carolyn L. Smith

Art Unit

1631

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) ____ is/are allowed.
- 6) ☒ Claim(s) 1 is/are rejected.
- 7) ☒ Claim(s) 1 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 31805.21405.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claim is directed. The present title is directed to an integrated virtual slide and live microscope system, whereas in contrast the claim is specifically directed to a method for simultaneously viewing remote images.

Claim 1 is herein under examination.

Information Disclosure Statement

The information disclosure statements (IDSs) submitted on 2/14/05 and 3/18/05 are in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statements have been considered by the examiner.

Specification

The abstract of the disclosure is objected to because on line 7 there is a misplaced “:”. This “:” should be replaced with a quotation mark. Correction is required. See MPEP § 608.01(b).

Claim Objections

Claim 1 is objected to because of the following minor informalities:

Claim 1 fails to end in a period.

Claim 1 appears to be reciting two “providing” steps and a “shifting” step; however, the claim lacks proper punctuation, such as commas or semicolons after each providing step or any conjunction (i.e. “and”) that explains the interconnection between the steps.

Claim 1 recites the phrase “shifting regions overlapping regions” which lacks proper grammatical punctuation, such as a comma.

The claim should not be included on a sheet including any other part of the application, as stated in MPEP 608.01(i).

Appropriate correction is requested.

Claims Rejected Under 35 U.S.C. § 112, Second Paragraph

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which the applicant regards as the invention.

The preamble of claim 1 recites a method for simultaneously viewing remote microscopic images and producing a seamless view of live and virtual images. The body of claim 1 recites

Art Unit: 1631

providing a virtual and live microscope slide and shifting regions to obtain the optimal image.

As the preamble recites simultaneous, remote, and seamless viewing which is not recited in the body of the claim while the body of the claim recites obtaining the optimal image, it is unclear if the preamble or body of claim 1 is intended to control the metes and bounds of this invention.

Clarification of this issue via clearer claim wording is requested.

Claim 1 (line 2) recites the phrase “live images” which is vague and indefinite. One interpretation is that the “live” image is referring to something alive. Another interpretation is that the “live” image is in real-time, but not necessarily a living specimen. Clarification of this issue via clearer claim wording is requested.

Claim 1 (line 3) recites the phrase “providing a virtual slide” which is vague and indefinite. It is unclear what is meant by virtual slide, because “virtual” (according to Webster’s II New Riverside Dictionary) is something existing or resulting in effect though not in actual existence. Therefore, it is unclear what is being provided if the slide does not actually exist. Clarification of this issue via clearer claim wording is requested.

Claim 1 (line 4) recites the phrase “live microscope slide” which is confusing, because a slide is not a living entity. Clarification of this issue via clearer claim wording is requested.

Claim Rejections – 35 USC §102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

Art Unit: 1631

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Weissman et al. (5,602,674) with support from Merriam-Webster online dictionary ("remote" definition).

Weissman et al. disclose using computers to record slide data and superimposing computer output display on a microscope field for viewing by the user (col. 2, lines 13-17) which represents simultaneous viewing of microscope images. Weissman et al. disclose a method of providing a slide with a pathological specimen to be viewed (slide 5b of Figure 1) on a microscope slide stage (col. 3, lines 62-63; col. 5, lines 34-40; col. 9 line 64 to col. 10, line 2) which represents providing a live (in real-time) microscope slide. Weissman et al. disclose a computerized slide image (200 in Figure 3) on a screen (9 on Figure 2) showing representations of areas initially scanned (col. 10, lines 16-17) which represents providing a virtual slide.

Weissman et al. disclose a position encoder is affixed to the slide stage with the motion sequence connected to the computer to convert signals on the computer display screen (9) cursor position "+" in Figure 2 (col. 10, lines 10-15) which represents automatically and sequentially shifting regions of images. Weissman et al. disclose moving the stage linked with the computer to record and store motion and various viewing locations with indicia, such as black dots, correlating to the microscope viewing area location on the specimen as well as marking "indicia of interest" for

Art Unit: 1631

subsequent retrieval (col. 5, lines 41-59 and col. 2, lines 45-52) wherein the correlated dot locations represent a seamless view and the subsequent retrieval of “indicia of interest” represent an optimal (most desirable) image. Weissman et al. disclose moving in an up-down direction for focus and then moving in an x-y direction during operation (col. 10, lines 2-9) which represents automatically and sequentially shifting regions to obtain the optimal image. Weissman et al. disclose the image of Figure 3a is indicative of up-down scanning and overlapping patterns wherein white areas (201) indicate portions not scanned which may constitute portions not covered by the specimen (col. 10, lines 16-22) which represents overlapping regions of images from slides. Weissman et al. disclose operators screening in overlapping regions or columns (col. 3, lines 54-55) and computing the percentage of overlapping fields (col. 4, lines 28-30). Weissman et al. disclose during subsequent reexamination of a specimen slide, a specimen is placed on a microscope stage and then previously recorded image slide is recovered wherein the cursor on the viewing screen of the representative slide image provides a continual correlation of position to the actual original microscope viewing area (col. 2, lines 59-63 and col. 6, lines 1-13) wherein the reexamining represents simultaneous viewing of remote microscope images [“remote” defined as separated by an interval, such as time, according to the Merriam-Webster online dictionary] between the original virtual and subsequent live viewing images and continual correlation represents a seamless view of images. Weissman et al. disclose automated screening devices providing moving stages and a computer that is instructed to and generates time controlled markings (col. 1, lines 61-67 and col. 2, lines 53-56).

Thus, Weissman et al. anticipate the instant invention.

Art Unit: 1631

Claim 1 is rejected under 35 U.S.C. 102(e) as being anticipated by Kamentsky et al. (5,793,969).

Kamentsky et al. disclose a method for network reviewing of a specimen slide (col. 2, lines 54-55). Kamentsky et al. disclose a system for review and analysis of computer encoded microscope slides and specimens originally encoded from a microscope that is retrievable at all remote locations of a network and for comparing an original slide being examined (=live) or scanned image of slide that is stored (=virtual) with on-line library cell type images (=virtual) (abstract) which represents simultaneous viewing remote microscope images comprising virtual and live images as well as providing virtual and live microscope slides. Kamentsky et al. disclose determining whether there was overlapping of viewing (col. 1, lines 31-33). Kamentsky et al. disclose multiple simultaneous reviews of encoded information obtained from slide analysis procedures of a microscope slide including stored images of the slide (col. 2, lines 11-16). Kamentsky et al. disclose providing automatic location and review of flagged slide specimen view sites (col. 2, lines 30-32). Kamentsky et al. disclose moving the slide stage with a specimen slide which is operatively linked to computer means to correlate movement and record locations pursuant to automatic programmed instructions (col. 2, line 61 to col. 3, line 13). Kamentsky et al. disclose network reviewing of a specimen slide that was previously examined with computer encoded movement including correlated recorded markings with areas of interest that are recalled in a computer generated image of the slide (col. 3, lines 24-67) and then placing the specimen slide on the moveable slide stage and moving the stage in correlation with viewing areas with indicia markings on the computer generated image (col. 4, lines 1-14) which represents automatic and sequential shifting regions wherein the correlated viewings represent

Art Unit: 1631

producing a seamless view of live and virtual images. Kamentsky et al. disclose marking areas of interest (col. 1, lines 57-65) and moving the stage containing the slide specimen to areas with correlated indicia of the computer generated image having a distinguished marking in order to be directly viewed with the microscope (col. 4, lines 9-14 and col. 9, lines 62-63) which represents shifting and overlapping (correlated) regions to obtain the optimal (desirable) image. Kamentsky et al. disclose relocating slide images at designated sites via a motor driven microscope with computer control (col. 5, lines 35-37 and col. 10, lines 6-10) which represents automatic and sequential shifting of images.

Thus, Kamentsky et al. anticipate the instant invention.

Conclusion

No claim is allowed.

Papers related to this application may be submitted to Technical Center 1600 by facsimile transmission. Papers should be faxed to Technical Center 1600 via the PTO Fax Center. The faxing of such papers must conform to the notices published in the Official Gazette, 1096 OG 30 (November 15, 1988), 1156 OG 61 (November 16, 1993), and 1157 OG 94 (December 28, 1993) (See 37 CFR §1.6(d)). The Central Fax Center number for official correspondence is (571) 273-8300.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carolyn Smith, whose telephone number is (571) 272-0721. The examiner can normally be reached Monday through Thursday from 8 A.M. to 6:30 P.M.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ardin Marschel, can be reached on (571) 272-0718.

Art Unit: 1631

Any inquiry of a general nature or relating to the status of this application should be directed to Legal Instruments Examiner Tina Plunkett whose telephone number is (571) 272-0549 or to the Technical Center receptionist whose telephone number is (703) 308-0196.

January 11, 2006

A handwritten signature in black ink, appearing to read 'Carolyn Smith', with a stylized flourish at the end.

Carolyn Smith
Examiner
Art Unit 1631